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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/676,333

09/29/2000

Paul J. Schneider

RAYT:013

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09/22/2004

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EXAMINER

CHEVALIER, ROBERT

ART UNIT

PAPER NUMBER

2616

DATE MAILED: 09/22/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/676,333

Applicant(s)

SCHNEIDER ET AL.

Examiner

Bob Chevalier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, 5-6, 8, and 26, are rejected under 35 U.S.C. 102(b) as being anticipated by the submitted prior art of Hill (P.N. 5,497,419).

Hill discloses a video data recording apparatus that shows all the limitations recited in claims 1, 5, and 26, including the feature of the video data compression unit generating compressed digital video data (See Hill's Figure 1, component 36, and column 3, lines 2-3), the feature of the video data recorder being capable of recording compressed digital video data in catastrophic event-survivable form (See Hill's Figure 1, component 30, column 4, lines 49-54, and column 6, line 51, to column 7, line 9), and the feature of the video data interface in signal communication between the compressor and the recorder, the interface being capable of converting the compressed video data to a compressed video data suitable for recording by the video data recorder as specified in the present claims 1, 5, and 26. (See Hill's Figure 1, components 32, and 34, and further, see Hill's column 7, lines 6-9).

With regard to claim 3, the feature of the compression unit being capable of converting inputted analog video data to the compressed digital video data as specified thereof is present in the cited reference of Hill. (See the signal conversion circuitry shown in Hill's Figure 1, component 36).

With regard to claim 6, the feature of the video camera generating analog video data to the compression unit as specified thereof is present in Hill. (See Hill's Figure 1, component 22).

With regard to claim 8, the feature of the system being configured for installation on a vehicle as specified thereof is present in Hill. (See Hill's column 4, lines 39-43).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claim 2, 4, 9-20, 22, and 27, are rejected under 35 U.S.C. 103(a) as being unpatentable over the submitted prior art of Hill in view of the submitted prior art of "Raytheon System Company, if a picture is worth a thousand words...".

The submitted prior art of Hill discloses a video recording apparatus that shows substantially the same limitations recited in claim 2, including the feature of the event-survivable recorder as shown in the present claim 2. (See the above rejection of claim 1).

Hill fails to specifically disclose the feature of the video data recording unit being a conventional flight data recording unit as specified in the present claim 2.

The submitted prior art of Raytheon System Company does disclose such a claimed conventional flight data recording system that can be mounted on a vehicle or an aircraft for the purpose of recording video data therefrom.

It would have been obvious to one skilled in the art to modify the Hill's video data recording apparatus wherein the recording means provided therefrom would be replaced by a flight data recorder system in the same conventional manner as is shown by the submitted prior art of Raytheon System Company. The motivation is to increase the safety of the recorded data on the recording system as suggested by the submitted prior art of Raytheon System Company.

With regard to claims 4, 11, 15, and 19, it is noted that the cited reference of Hill discloses substantially the same limitations recited in the present claims 4, 11, 15, and 19, including the feature of the interface. (See the above rejection of claim 3).

It is noted that the cited reference of Hill fails to specifically disclose the feature of the recorder being capable of recording the compressed video data at rate of about 256 Kbps as specified in the present claim 4, and 19, or of about 250 as specified in claim 11, and 15.

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The submitted prior art of Raytheon System Company does disclose the feature of the recorder being capable of recording the compressed video data at rate of 250 Kbps (which 250 Kbps would also reasonably be read on the claimed limitation of claim 4, and 19, of about 256 Kbps, when given the broadest interpretation; since, it is to be recognized that about 256 Kbps is not exactly 256 Kbps). (See the first two lines of the third paragraph shown in the submitted prior art of Raytheon System Company).

It would have been obvious to one skilled in the art to modify the Hill's recording apparatus wherein the recording means provided thereof would incorporate the capability of recording the compressed video data at rate of about 250 Kbps in the same conventional manner as shown by Raytheon System Company. The motivation is to increase the speed of the recording operation as suggested by Raytheon System Company.

With regard to claims 9-10, 14, 16, and 22, Hill discloses a video recording apparatus that shows substantially the same limitations recited in claims 9-10, 14, 16, and 22, including the feature of the event-survivable recorder. (See the above rejection of claim 1).

Hill fails to specifically disclose the feature of the system being configured to be installed on an aircraft, land-based or sea-based facility as specified in the present claims 9-10, 14, 16, and 22.

The submitted prior art of Raytheon System Company does disclose such a conventional flight data recording system that can be mounted on a vehicle, an aircraft,

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or land-based facility as claimed in claims 9-10, 14, 16, and 22, for the purpose of recording video data therefrom.

It would have been obvious to one skilled in the art to modify the Hill's recording apparatus wherein the video data recording system can be placed on an aircraft, or a land-based facility for the purpose of recording video data on the recording unit in the same conventional manner as is shown by the submitted prior art of Raytheon System Company. The motivation is to be able to record video data of these facilities at any desired time as suggested by Raytheon System Company.

With regard to claims 12, 17, and 27, the feature of the recording unit capable of saving at least about 30 minutes of compressed video data prior to catastrophic event as specified thereof is present in the proposed combination of Hill and Raytheon System Company indicated above in the rejection of claims 4, and 11. (See the first two lines of the third paragraph shown in the submitted prior art of Raytheon System Company).

With regard to claims 13, 18, and 20, the feature of the video camera generating analog video data to the compression unit as specified thereof is present in the proposed combination of Hill and Raytheon System Company indicated above in the rejection of claims 4, and 11. (See Hill's Figure 1, component 22).

6. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over the submitted prior art of Hill and Raytheon System Company as applied to claim 16 above, and further in view of the submitted prior art of "Rakefet Advise Airbone Direct Visual Imaging For Safety Enhancement".

The proposed combination of Hill and Raytheon System Company indicated in the above rejection of claim 16 discloses a video data recording system in an aircraft which discloses substantially the same limitations recited in claim 23, including the feature of recording compressed video data of the aircraft on a recording unit. (See the above rejection of claim 16).

The proposed combination of Hill and Raytheon System Company fails to specifically disclose the feature of the video processor, the control cockpit unit, and the display unit, wherein the control cockpit unit is configured to generate control signal to the video processor so as to control the video processor to output received video data to the input of the control cockpit unit and wherein the cockpit control unit would output said video data to the display unit as specified in the present claim 23.

However, it is to be noted that all such features indicated above would be inherently present in the submitted prior art of Rakefet. Because, Rakefet discloses a video data recording system being installed in an aircraft, which system includes the capability of playing back recorded video data on a display means. It is noted that said Rakefet's recording system has the capability of generating control signal from a control unit located in a cockpit control area for the purpose of playing back recorded video data from a recording unit and displaying the played back video data on a display unit located on the cockpit area. Applicant's attention is directed to Rakefet's Figure located at the last page thereof.

It would have been obvious to one skilled in the art to modify the proposed combination's recording system indicated above wherein the recording means provided

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thereof would incorporate the capability of generating control signal from a control unit located in a cockpit control area of the aircraft for the purpose of playing back recorded video data from a recording unit and displaying the played back video data on a display unit located on the cockpit area in the same conventional manner as shown by the submitted prior art of Rakefet. The motivation is to give the pilot of the aircraft a better control over the aircraft as suggested by Rakefet.

7. Claims 7, and 21, are rejected under 35 U.S.C. 103(a) as being unpatentable over the submitted prior art of Hill and "Raytheon System Company, if a picture is worth a thousand words..." as applied to claims 15-18 above, and further in view of Fujioka.

The proposed combination of the submitted prior arts of Hill and Raytheon System Company indicated above discloses a video data recording apparatus that shows substantially the same limitations recited in claims 7, and 21, including the feature of compressing the video data and recording the compressed video data in a recording unit as specified in the present claims 7, and 21. (See the above rejection of claims 15, and 16).

The proposed combination of the submitted prior arts of Hill and Raytheon System Company fails to specifically disclose the feature of reproducing the compressed recorded video data from the recording unit and providing said compressed video playback data to the compression unit wherein the compression unit is arranged in a manner to convert said received compressed video playback data into analog video playback data and output the same as specified in the present claims 7, and 21.

Fujioka discloses a video data recording and reproducing apparatus which includes the capability of a compressing unit for compressing inputted video data and recording the same compressed video data into a recording unit. It is further noted that the Fujioka's recording/reproducing apparatus includes the capability of reproducing the compressed recorded video data from the recording unit and providing said compressed video playback data to the compression unit wherein the compression unit is arranged in a manner to convert said received compressed video playback data into analog video playback data and output the same as specified in the present claims 7, and 21. (See Fujioka's Figure 3, components 55, 52, 56, 59, and the DV CODEC).

It would have been obvious to one skilled in the art to modify the proposed combination of Hill and Raytheon System Company indicated above wherein the compressing/recording means provided thereof would incorporate the capability of reproducing the compressed recorded video data from the recording unit and providing said compressed video playback data to the compression unit wherein the compression unit is arranged in a manner to convert said received compressed video playback data into analog video playback data and output the same in the same conventional manner as shown by Fujioka. The motivation is to retrieve the recorded video data and output the same at any desired time as suggested by Fujioka.

8. Claims 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over the submitted prior arts of Hill and Raytheon System Company, and further Fujioka as applied to claims 7, and 21 above, and further in view of the submitted prior art of "Rakefet Advise Airborne Direct Visual Imaging For Safety Enhancement".

The proposed combination of Hill, Raytheon System Company, and Fujioka indicated in the above rejection of claims 7 and 21, discloses a video data recording/reproducing system in an aircraft which discloses substantially the same limitations recited in claims 24-25, including the feature of recording/reproducing compressed video data of the aircraft on/from a recording unit. (See the above rejection of claims 7, and 21).

The proposed combination fails to specifically disclose the feature of the system including a cockpit control unit for controlling said recording unit and playback modes of said compression unit and said video data recording unit so as to control recording of the video data from a video camera by the recording unit, to control display of the video playback by a video display as specified in the present claims 24-25.

However, it is to be noted that all such features indicated above would be inherently present in the submitted prior art of Rakefet. Because, Rakefet discloses a video data recording/reproducing system being installed in an aircraft, which system includes the capability of playing back compressed recorded video data on a display means. It is noted that said Rakefet's recording/reproducing system has the capability of generating control signal from a control unit located in a cockpit control area for the purpose of playing back compressed recorded video data from a recording unit and displaying the played back video data on a display unit located on the cockpit area. Applicant's attention is directed to Rakefet's Figure located at the last page thereof.

It would have been obvious to one skilled in the art to modify the proposed combination's recording/reproducing system indicated above wherein the

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compressing/recording means provided thereof would incorporate the capability of generating control signal from a control unit located in a cockpit control area of the aircraft for the purpose of playing back compressed recorded video data from a recording unit and displaying the played back video data on a display unit located on the cockpit area in the same conventional manner as shown by the submitted prior art of Rakefet. The motivation is to give the pilot of the aircraft a better control over the aircraft as suggested by Rakefet.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bob Chevalier whose telephone number is 703-305-4780. The examiner can normally be reached on MM-F (9:00-6:30), second Monday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 703-305-4725. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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B. Chevalier
September 20, 2004.


ROBERT CHEVALIER
PRIMARY EXAMINER